

THE ELECTRICAL EXHIBITION AT THE CRYSTAL PALACE



which first made it possible on a commercial basis. To-day large and increasing areas of London and many provincial towns are lighted by electricity. Supply stations are spreading throughout the country, and the Crystal Palace Exhibition is visited almost daily by deputations from municipal bodies seeking information prior to the adoption of the light. In London alone there are at present eleven electric supply companies, with a capital of upwards of four millions; conductors have been laid under 300 miles of streets, and there are upwards of half a million lamps of eight-candle power burning each evening, besides nearly 1500 arc lamps.

The exhibition at the Crystal Palace is not only interesting from a scientific and mechanical point of view, it is attractive as a show, and at night when the nave from one end to the other is bathed in the light of countless lamps, the throngs of spectators may well gaze in astonishment. Ten thousand coloured lamps are suspended on a wire screen at one stall; groups of arc lamps placed on lofty masts shed their rays over the brilliant scene from a higher elevation; while at times powerful search lights illumine the uttermost parts of the building.

Going first to the root of the subject—the means for producing the electricity, the visitor will find a large number of fine machines of different sizes and types. The Brush Electrical Engineering Company are among the foremost in this field. They have been allotted two large spans. One of these, situated close to the high level entrance, shows various types of the Company's plant in motion, and demonstrates very fully the various systems adopted by the Brush Company for the generation and distribution of electricity. Not the least interesting feature of this exhibit is that both engines and dynamos, and indeed all the machinery shown, is manufactured entirely by, and at the works of, the Company. At their stall in the nave the same Company show a number of various machines, all alike admirable in design and perfect in workmanship. Messrs. Woodhouse and Rawson



MESSRS. WOODHOUSE AND RAWSON'S EXHIBIT

have also an important and interesting exhibit, which is surmounted by a curious device. Two large, diamond-shaped pieces of wood are suspended above it, and grooved letters, W. & R., are formed by fitting together pieces of silvered glass. In the grooves thus formed incandescent lamps, coloured alternately blue and red, are placed, and clockwork is arranged to alter the connections at certain intervals, and so form the letters alternately with red and blue lamps. On another part of the stand is the model of an electric-launch recently built by the Company for Mr. Pears. The necessity for a good motor for launch work led the Company to design the "Woodhouse & Rawson" type, several sizes of which are shown. Special pains have been taken to keep the centre of gravity as low as possible, and also to render the armature waterproof. These and other improvements, have resulted in the production of a reliable motor, which has excited a good deal of attention. Another novelty exhibited by the Company is a contrivance for switching in an electric circuit at any pre-determined time. A clock is set to a certain hour, and it is so arranged that its movements release a pivoted arm which, when free, falls into two mercury cups, and makes electric contact.

The principal feature of the exhibition, however, and the one that most attracts the general public, is the examples of electricity utilised for purposes of domestic lighting and ornamentation. The house decorator and the electrician have here combined their energies, and the results in some cases are exceed-

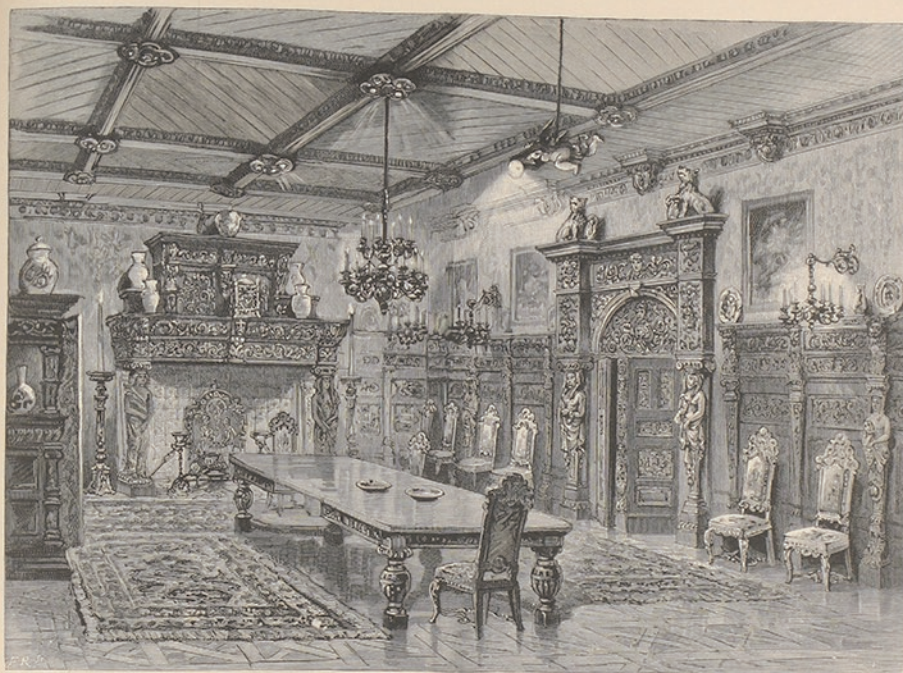


MESSRS. RASHLEIGH PHIPPS AND DAWSON'S EXHIBIT—INTERIOR OF THE MOSQUE

ingly beautiful. Messrs. Frank Giles and Co., of Kensington High Street, exhibit in the gallery under the clock, a suite of three rooms all furnished in antique style, with old fittings ingeniously adapted for the electric light. Our artist has chosen the dining-room for the subject of his illustration. It is a handsome room, measuring 33 feet by 18, panelled with old oak to a height of eight feet, the figures in the panels being exquisite in conception and workmanship. The doorway and fireplace are in the same style, the latter being supported by life-size figures, finely sculptured, brought from Chateau Myer (Baron de Myer), Turnhout. The principal buffet and various smaller ones, with side-tables, chairs, dining-tables, &c., are of the same period. The walls above the panelling are hung with antique tapestry. The ceiling is from an old palace in Spain, and a novel effect is obtained by the introduction of electric lights in the deep recesses of the carving, which gives a soft and agreeable light. The room is further lighted by six old gun-metal chandeliers, hung on brackets over the panelling, and fitted with imitation candles, four curious old candlesticks, six feet high, fitted with large candles, at each corner of the room, and by candlesticks on the tables; all being shaded, to tone the light to an agreeable strength. The hall is somewhat similar in style, being panelled to a height of seven feet, and hung above with antique tapestry. The cabinets, fireplace, &c., are also fourteenth century Gothic. The whole is quaintly lighted by four old brass lanterns, hung from the ceiling at each corner.

The drawing-room belongs to the Louis XVI. period. The panelling, which is eleven feet high, is of beautifully figured oak, enriched with finely carved and gilt ribbons and festoons. Over this panelling is hung an antique silk velvet of delicate sea-green colour, with embroidered design in gold. The ceiling has been specially designed and painted for this room. The room is lighted by a chandelier, carved and gilt, purchased at the sale of the late Lord Truro, and is probably the finest specimen of English wood-carving extant.

In this connection must be mentioned the Cairo Mosque exhibited by Messrs. Rashleigh, Phipps and Dawson, which is unsurpassed as an example of electricity applied for picturesque purposes. The dome is covered in with glass and amber cloth, in the centre of the stand is an exquisite fountain in



THE RENAISSANCE DINING HALL, EXHIBITED BY MESSRS. FRANK GILES AND CO., HIGH STREET, KENSINGTON

bronze and marble, the base of which is formed by stalactite rockwork formation, studded with ferns. The recesses of the rockery are illuminated by electric light with charming effect. In one of the corner turrets is a statuette of a graceful vestal, who with one hand is putting down the ancient smoky torch, while with the other she holds aloft the electric light. In another turret is another statuette of the three Atlases, supporting on their shoulders the world, on which is standing an angel of light. The same firm in the South Gallery exhibit a suite of three rooms charmingly illuminated.

Although only slightly connected with electricity, Messrs. Chubb and Son's exhibit has excited so much interest that it calls for notice here. The model safe deposit which they have on the stand is fitted with an electric check lock, by means of which the manager or other authority can prevent the gate being opened (even by the warder) whenever he wishes, by merely pressing a button at his side. The same firm show a wonderful lock which can be made with any number of combinations, separate keys being provided for each. In the event of a key being lost, by simply shutting the safe with another key the lock is so altered that the missing key becomes useless, the lock being workable only by the last key used; and this process can be continued indefinitely.

In a second article we shall refer to other important exhibits at this interesting exhibition.

THE NEW ROYAL SCOTTISH ACADEMICIANS.

At a meeting of the Royal Scottish Academy held in Edinburgh on Wednesday, February 10, three Associates were elected fully members, viz., Messrs. James Guthrie, J. Campbell Noble, and J. Denovan Adam. The vacancies were caused by the deaths of Sir W. Pettes Douglas, Sir John Steel, and Mr. J. Dick Peddie. It is the first election that has taken place under the Academy's new charter, in virtue of which Associates as well as full members have a right to vote.

Mr. James Guthrie is a West of Scotland man, and is closely identified with Glasgow, where he is generally regarded as the leader of the younger body of artists whose work has of late years attracted much attention both at home and abroad. Mr. Guthrie's rise in the Academy has been rapid; he was admitted an Associate in 1888. The first picture that made him generally known was the "Highland Funeral," a powerful and sympathetic canvas. Since then he has advanced much in grasp, in technique, and in breadth, both of view and handling. He is keenly appreciative of tone, and is an

accomplished pastelist. His equestrian portrait of "Hugh Smith, Esq.," gained a gold medal for him at Munich; he has also received a medal at the *Salon*. He paints chiefly portraits and landscape. One of the subjects on which he is at present engaged is a portrait of Archbishop Eyre, which is to be presented to His Grace by the Roman Catholic clergymen of the West of Scotland.

Mr. J. Campbell Noble was elected an Associate in 1879. He is a hand-



MR. J. DENOVAN ADAM MR. JAMES GUTHRIE MR. J. CAMPBELL NOBLE

scape and sea painter of power and originality, delighting in great stretches of sky and earth. His skies are especially good, and he is not afraid of colour. He lives at Coldingham, on the Berwickshire coast, a centre of picturesque and striking scenery. Mr. J. Denovan Adam, whose Associateship dates from 1884, has earned a high reputation as an animal painter. On all matters connected with cattle—especially Highland cattle—he is an authority. He renders the shaggy, long-horned little Celts with truth and vigour, and his landscape settings for his groups of beasts are more than mere backgrounds. His hill-sides and moors, farmyards and drove roads, are painted with admirable knowledge of both form and colour. In water-colours Denovan Adam shows grace and sweet tone. He lives at Cragmill, near Stirling, where he has fields, byres, &c., for the proper accommodation of the birds and animals he portrays. His works are numerous, but one of the best, "By Mountain, Moss and Moor," is now in the Glasgow Institute Exhibition. This picture and Mr. Guthrie's "Miss Spencer" were reproduced in our Glasgow Institute supplement of 6th February.